

## **May 24, 2011 Water Supply Forecast Discussion**

This forecast includes observed conditions through the morning of May 24, 2011.

This forecast is posted at:

<http://cdec.water.ca.gov/cgi-progs/iodir?s=b120up>.

### **Forecast Summary:**

The projected median April-July runoff now ranges from 139 percent (Sacramento River at Bend Bridge) to 189 percent (Kern River). The forecasts for several rivers went up or remained the same since last week except the Yuba which went down.

### **Runoff:**

All forecasted rivers are flowing above normal, for May, with the data that is available. The Tuolumne River is flowing at the lowest rate, 118 percent of normal and the Feather River is flowing at the greatest rate, 164 percent of normal. Meanwhile, the Kings and San Joaquin Rivers are both flowing at the same rate, 122 percent of normal.

### **Precipitation:**

The Northern Sierra 8-Station Index (Monday, May 23<sup>th</sup>) reflects a May total of 3.1 inches (148 percent of the May average) after gaining nearly 2 inches of precipitation over the past week. The seasonal total is now 67.5 inches, which is 143 percent of average-to-date and 135 percent of an average water year. The San Joaquin 5-Station Index (Monday, May 23<sup>th</sup>) shows a monthly total of 3.0 inches (167 percent of the May average) after gaining 1.7 inches of precipitation over the past week. The seasonal total is now 60.7 inches, which is 158 percent of average-to-date and 149 percent of an average water year.

### **Snowpack:**

According to snow sensor data from the morning of May 24<sup>th</sup>, statewide snowpack is 30 inches (107 percent of the April 1 average and 249 percent of average-to-date). The increase in statewide percent of average-to-date since last week suggests that the snow continues to melt at a slower than normal pace for this time of the year. Regionally, the Northern Sierra, Central Sierra, and Southern Sierra snowpack are 112, 110, and 93 percent of their respective regional April 1 average.

Although there has been great interest in snow surveys for June, we will continue to follow our measurement schedule which does not recommend any surveys to be performed. However, some snow sensor control (field verification) data will be collected for June.

In our Important Links section below, we have now included hyper-links for the 20-day and peak day snow melt forecasts issued by the California-Nevada River Forecast Center. These forecasts are automatically updated daily and are available around noon each day. These links are listed under **"California Nevada River Forecast Center Snow Melt Guidance Products"** below.

### **Weather and Climate Outlooks:**

The weather forecast for the next six days is dry. Freezing levels will range from 6,000-10,000 feet in the Northern Sierra and from 8,000-14,000 feet in the Central and Southern Sierra. The coolest days will likely be today, Saturday and Sunday.

The Climate Prediction Center's (CPC) six to ten day outlook (6/1/11-6/5/11), temperatures across the entire state is forecast to be below normal. During this same period above normal precipitation is forecast for the northern third of the state, while equal chances are forecast for the remaining areas.

The CPC's one-month outlook for June, updated on May 19, suggests increased chances of below normal temperatures for areas near the Oregon border and increased chances of above normal temperatures for the Mojave Desert region. All other areas are forecast to have equal chances of above or below normal temperatures. The same outlook suggests equal chances of above or below normal precipitation for the entire State.

The CPC's three-month outlook (June-August, updated May 19) suggests increased chances of above normal temperatures for the bulk of the Central Valley, the Sierra Nevada, the and the Colorado River region. For all other regions including the Shasta-Trinity region, equal chances of above or below normal temperatures are forecast. The same outlook suggests increased chances of below normal precipitation for the northwest region of the State which would include parts of the Klamath, and Trinity River watersheds. For all other areas of the State, this outlook calls for equal chances of above or below normal precipitation.

**Next Update:**

The next Bulletin 120 Forecast update will be produced for conditions on May 31, 2011, and will be available by Thursday, June 2, 2011. If you need guidance before then, or have any questions, please contact us:

**Snow Surveys Staff Contact Information:**

Dave Rizzardo, Chief ([daver@water.ca.gov](mailto:daver@water.ca.gov)) 916-574-2983

John King ([kingjj@water.ca.gov](mailto:kingjj@water.ca.gov)) 916-574-2637

Steve Nemeth ([nemeth@water.ca.gov](mailto:nemeth@water.ca.gov)) 916-574-2634

Andy Reising ([areising@water.ca.gov](mailto:areising@water.ca.gov)) 916-574-2181

Richard Mora ([rmora@water.ca.gov](mailto:rmora@water.ca.gov)) 916-574-2636

**Important Links**

**Full Natural Flow Data:**

Daily FNF

<http://cdec.water.ca.gov/cgi-progs/reports/FNF>

Monthly FNF

<http://cdec.water.ca.gov/cgi-progs/reports/FNFSUM>

Seasonal FNF

<http://cdec.water.ca.gov/cgi-progs/reports/FLOWOUT>

**Precipitation Data:**

Northern Sierra 8-Station Precipitation Tabulation Table

[http://cdec.water.ca.gov/cgi-progs/products/8-Stations\\_Tab.pdf](http://cdec.water.ca.gov/cgi-progs/products/8-Stations_Tab.pdf)

San Joaquin 5-Station Precipitation Tabulation Table

[http://cdec.water.ca.gov/cgi-progs/products/5-Stations\\_Tab.pdf](http://cdec.water.ca.gov/cgi-progs/products/5-Stations_Tab.pdf)

2010 WY Precipitation Summary

<http://cdec.water.ca.gov/cgi-progs/precip/PRECIPSUM>

**Snow Data:**

Latest Snow Sensor Report

<http://cdec.water.ca.gov/cgi-progs/snow/PAGE6>

Latest Statewide Summary of Snow Water Equivalents

<http://cdec.water.ca.gov/cgi-progs/snow/DLYSWEQ>

Monthly Snow Course Report

<http://cdec.water.ca.gov/cgi-progs/snow/COURSES>

**California Nevada River Forecast Center Snow Melt Guidance Products:**

Snow Data and Spring Seasonal Runoff Forecasts

<http://www.cnrfc.noaa.gov/snowmelt.php>

20-Day Snowmelt Guidance (Raw Model Output)

<http://www.cnrfc.noaa.gov/awipsProducts/RNOHFSESP.php>

Peak 1-Day Stream flow Volume and Date Forecast

<http://www.cnrfc.noaa.gov/awipsProducts/RNOHFSSPK.php>

**Extended Regional Forecasts:**

California Nevada River Forecast Center 6 Day QPF and Snow Level Forecast

<http://www.cnrfc.noaa.gov/awipsProducts/RNOHD6RSA.php>

Climate Prediction Center 6-10 Day Outlook Forecasts

<http://www.cpc.ncep.noaa.gov/products/predictions/610day/>

Climate Prediction Center One-Month Outlook Forecasts

<http://www.cpc.noaa.gov/products/predictions/30day/>

Climate Prediction Center Three-Month Outlook Forecasts

<http://www.cpc.noaa.gov/products/predictions/90day/>

**Drought Information:**

U.S. Seasonal Drought Outlook

[http://www.cpc.ncep.noaa.gov/products/expert\\_assessment/seasonal\\_drought.html](http://www.cpc.ncep.noaa.gov/products/expert_assessment/seasonal_drought.html)

**El Nino/La Nina:**

[http://www.cpc.ncep.noaa.gov/products/analysis\\_monitoring/enso\\_advisory/](http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/enso_advisory/)